REMARKS/ARGUMENTS

Claims 12-21 are pending in this application, with claims 12, 15, and 20 being the only independent claims. Claims 12, 13, 15, 16, 18, 19, and 20 are amended. Claim 22 is added. Claims 1-11 were previously canceled without prejudice or disclaimer.

Claims 12-16 and 20 stand rejected under 35 U.S.C. §103 as unpatentable over U.S. Patent No. 7,277,453 (Chin) in view of U.S. Patent No. 6,016,512 (Huitema) and in view of U.S. Pub. No. 2004/0218611 (Kim).

Claims 17 and 21 stand rejected under 35 U.S.C. §103 as unpatentable over Chin, Huitema, and Kim, and further in view of U.S. Pub. No. 2004/0133775 (Callas).

Claims 18-19 stand rejected under 35 U.S.C. §103 as unpatentable over as unpatentable over Chin, Huitema, and Kim, and further in view of WO 2005/069663 (Laurila).

Before discussing the cited prior art and the Examiner's rejections of the claims in view of that art, a brief description of the subject matter described in the present application is deemed appropriate to facilitate understanding of the arguments for patentability. The description is not meant to argue unclaimed subject matter.

The present invention solves a problem related to determining domain names that occurs during a communication between network operators, when one of the network operators is an IP Multimedia Subsystem (IMS) service platform. In this particular case, domain names may need to be determined for internal elements of the operator of the IMS service platform. However, the necessary addresses of an IMS service platform are not stored in DNS servers of the Internet for security reasons (see page 1, line 24 - page 2, line 7 of the application as originally filed).

In known methods, the transmitting operator would maintain a static list or database of network elements. For the network elements that are not available from the public DNS system, it is difficult to keep the static list or database up to date (see page 2, lines 9-18 of the application).

Accordingly, the purpose of the present invention is to allow a transmitting operator to query a receiving operator for the data of the network element before forming a connection, for example, in an IMS environment where the network element data is not available in DNS servers of the Internet (see page 2, lines 20-25).

According to the invention, the transmitting operator makes a dynamic query to a private database of the receiving operator, which provides the properties of the required network element. Thus, the transmitting operator does not have to maintain these properties (see page 3, lines 1-7 of the application as originally filed).

According to an embodiment of the present invention, a first network, i.e., the transmitting network, has a control element S and a local name server D (see Fig. 1 and page 5, lines 10-26). A second network, i.e., the receiving network, has a contact point I that functions as an access point to the second network (see page 5, lines 5-8) and a name server PD which stores network addresses of the internal elements of the operator network (see page 5, lines 29-32).

According to an embodiment of the present invention, when a subscriber of the transmitting network sends a SIP INVITE message to a subscriber of the receiving network the control element S queries the local name server D of the transmitting network and the local name server of the transmitting network in turn queries the private name server PD of the receiving network for the address of the contact point I of the second network (see page 6, lines 10-18). After the private name server PD has provided the address, the local name server D forwards the information to the control element S which then transmits the communication to the contact point I of the receiving

8

network (page 6, lines 18-21). Accordingly, the local name server D of the transmitting network is required to store only the network address of the private name server PD of the receiving network.

Independent claim 12 has been amended to clarify that at least the receiving network is an IMS data transmission network, and expressly recites "wherein at least the second operator network is an IP Multimedia Subsystem (IMS) data transmission network" and "the first operator network comprising a first name server and the second operator network comprising a second name server and the required access point for receiving communication from at least the first operator network" and "transmitting the query from the first name server to the second name server of the second operator network, the second name server comprising network addresses of access points of the second operator network".

Since claim 12 requires that the second network is an IMS data transmission network, the information on the network elements of the second network are not available from a DNS servers of the Internet.

The Examiner's proffered combination of Chin, Huitema, and Kim fails to teach or suggest the above limitations because Huitema, which the examiner considers as teaching the above-cited step of transmitting, fails to disclose a name server of one network transmitting a query to a name server of a second network, which is an IMS data transmission network, as will be described in more detail below.

Chin discloses inter private network communications in which a host in one private network accesses another host in another private network via a public network (See Figs. 1 and 2 of Chin). Chin teaches that a gateway 310 is arranged between each private network and the public network (see col. 7, lines 58-65; and Fig. 3 of Chin). The gateway 310 includes a relay 320 that accepts packets from the private network and send them to a destination or accepts incoming packets from

the public network and directs them to a host in the private network (see col. 8, lines 3-13 of Chin).

As acknowledged in the office action, Chin fails to disclose "transmitting the query from the first

name server to the second name server of the second operator network, the second name server

comprising network addresses of access points of the second operator network", as recited in

independent claim 12.

The Examiner acknowledges that Chin does not explicitly teach a DNS server directly

transmits a query to another DNS server. The Examiner relies on the teachings of Huitema in

combination with Chin to disclose that limitation. Even if Chin and Huitema were to disclose what

they are purported to teach, they would still fail to disclose the claimed invention, because

independent claim 12 explicitly recites that the second server is an IMS data transmission network,

the elements of which are not available from a public DNS system. Huitema also fails to disclose

what Chin lacks because Huitema relates to operations between DNS servers within a single

network.

The Examiner refers to Fig. 1 and col. 1, lines 39-55 of Huitema. This section of Huitema

discloses a typical DNS query (see col. 1, lines 18-28). Thus, there is no teaching or suggestion in

Huitema for querying outside of the DNS system, i.e., for network elements of an IMS network.

Huitema discloses only querying a server within the same network and not the server of another

network. Thus, the combination of Huitema and Chin results in each network of Chin having the

local cache server 310 disclosed by Huitema. Accordingly, the combination of Chin and Huitema

fails to disclose "transmitting the query from the first name server to the second name server of

the second operator network, the second name server comprising network addresses of access

points of the second operator network", as expressly recited in independent claim 12.

Kim fails to disclose what Chin and Huitema lack. Kim discloses a gateway for supporting communications devices in different networks. According to Kim, a DNS server 330 is connected to the Internet between Gateways to two different private networks. Since Kim also discloses using the DNS system to determine network element addresses, Kim also fails to disclose "transmitting the query from the first name server to the second name server of the second operator network, the second name server comprising network addresses of access points of the second operator network", as expressly recited in independent claim 12.

The additional references of Callas and Laurila, cited by the Examiner in the rejections of dependent claims 17-19 and 21, also fail to disclose the recited limitations. Callas merely discloses that a mail server can be a LDAP server. Laurila discloses monitoring session content and signalling information in an IMS network. However, Laurila fails to disclose any method or apparatus for querying a private name server of an IMS network. Thus, Callas and Laurila fail to disclose, teach or suggest anything about a name server of an IMS network being queried for a network address of a network access point.

In view of the above remarks, independent claim 12 is allowable over the combination of Chin, Huiteama, Kim, Callas and Laurila.

Independent claims 15 and 20 are directed to a method and a name server, respectively, and include limitations similar to the above limitations of independent claim 12. Accordingly, independent claims 15 and 20 should be allowable for at least the same reasons as is independent claim 12.

Dependent claims 13-14, 16-19, and 21-22 are allowable for the same reasons as are independent claims 12, 15, and 20, as well as for the additional recitations contained therein. Claims 14 and 16 are amended and new claim 22 is added to recite that the name server of the

second network is a private name server and that the network elements of the second network are not available on a public DNS system. Support for these amendments is found at page 2, lines 1-7 and private operator name server PD. The remaining amendments are made to be consistent with the changes to independent claims 12, 15, and 20.

The application is now deemed to be in condition for allowance, and early notice to that effect is solicited.

Should the Examiner have any remaining comments, questions, suggestions, or objections, the Examiner is respectfully requested to telephone the undersigned in order to resolve any outstanding issues.

It is believed that no additional fees or charges are required at this time in connection with the present application. However, if any additional fees or charges are required at this time, they may be charged to our Patent and Trademark Office Deposit Account No. 03-2412.

Respectfully submitted,
COHEN PONTANI LIEBERMAN & PAVANE LLP

By   /Alfred W. Froebrich/
            Alfred W. Froebrich
            Reg. No. 38,887
            551 Fifth Avenue, Suite 1210
            New York, New York 10176
            (212) 687-2770

Dated: May 18, 2011